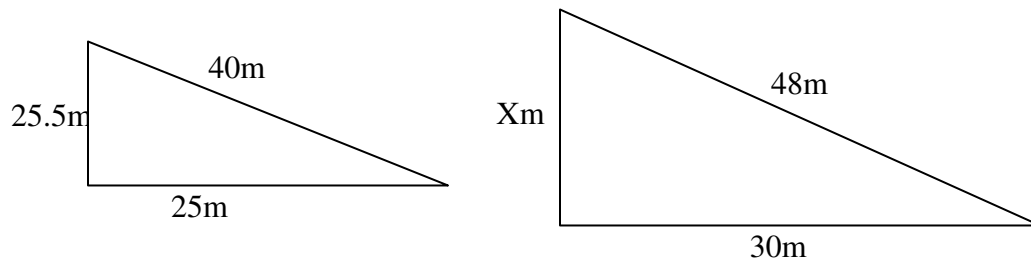


Assessment Practice

Name _____

Work each problem out to the best of your ability. You will be assessed on your ability to reach reasonable conclusions and communicate those conclusions to the reader using the mathematical tools indicated.

- Include all work
 - Include an explanation of the process you used to solve the problem
 - Include convincing mathematical justification
 - Include any equations, graphs, tables, or diagrams you used to solve the problem
 - If you used a graphing calculator, include a sketch or print out of the display that was helpful to you.
1. A car travels 60 miles on 4 gallons of gas. Write and solve a proportion to determine the number of gallons needed to travel 240 miles.
 2. A survey indicated that 6 out of 7 doctors used brand Q aspirin. If 2800 doctors were surveyed, how many used brand Q?
 3. Use dimensional analysis to change
 - a. 11.6 tons to pounds
 - b. 504 minutes to weeks
 - c. 1388.89 centimeters per second to kilometers to hours
 4. The tax rate in a certain state is 3%. Find the total price paid for a pair of shoes that costs \$34.
 5. The circulation of a newsletter increased from 3400 to 3526. What was the percent increase in circulation to the nearest whole percent?
 6. The two triangles are similar. Find the length of the unknown side.



7. In a cake batter mixture, the ratio of cups of sugar to flour is 1:3. How many cups of flour are needed for 8 cups of sugar?